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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630,248	08/01/2000	Masaaki Oka	WINX-55325	8369

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EXAMINER

NGUYEN, KIMBINH T

ART UNIT	PAPER NUMBER
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2671

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/630,248	Applicant(s) OKA ET AL.	
	Examiner Kimbhinh T. Nguyen	Art Unit 2671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8 and 24-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

By

DETAILED ACTION

1. This action is responsive to amendment filed 08/08/05.
2. Claims 5-8 and 24-28 are pending in the application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 6, 8, 24-26, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoden et al. (5,251,296) in view of Murphy (6,111,584).

Claims 5 and 25, Rhoden et al discloses an apparatus comprising: A processor for generating coordinate data specifying a desired primitive (column 4 lines 15-20); a pixel generator for generating pixel data of the desired primitive (column 4 lines 15-22 and 33-36); a control circuit for specifying a shape of an optimal pixel pattern according to the coordinate data generated by the processor (column 4 lines 1-35); an accessing unit for accessing a memory and storing the pixel data generated by the pixel generator into the memory according to an optimal pixel pattern (column 4 lines 33-36); a control circuit for specifying a shape of the optimal pixel pattern according to the coordinate data generated by the processor (column 4 lines 15-22 and 33-36) such that the accessing unit stores the pixel data into the memory with the minimum number of times

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of accessing the memory (column 2 lines 54-61). However, Rhoden et al does not specifically disclose under the condition that an identical pixel pattern is commonly used in a first access of the memory and a subsequent access of the memory. This is disclosed in Murphy in column 5, lines 45-60; figs. 3C and 3D. It would have been obvious to one of ordinary skill in the art at the time the invention was made to access the common scanned in a horizontal direction of the pixel pattern as in Murphy with the system of Rhoden et al because it would provide for an optimized throughput by only performing processor-intensive operations on pixels which will actually be displayed (col. 4, lines 65-67).

Claims 6 and 26, Rhoden et al discloses wherein the control circuit specifies the shape of the optimal pixel pattern by selecting one pixel pattern from a plurality of pixel patterns according to the coordinate data, the plurality of pixel patterns being different in shape from each other and each of the plurality of pixel patterns having the same number of pixels (column 6 lines 5-20).

Claim 8, Rhoden does not specifically disclose a video game comprising the apparatus according to claim 5. However, Rhoden does disclose how the graphic workstation industry has been driven to provide more powerful computer graphics workstations which can perform graphics simulations quickly and with increased detail. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system of Rhoden with the a video game system because this would have allowed the graphics simulations to perform more quickly since

the tile hit rates are improved (column 4 lines 1-6) and the object of video games is to provide graphics quickly.

Claim 24, Rhoden et al discloses wherein the control circuit; detects at least one pixel pattern through which the accessing unit is allowed to access the memory and store the pixel data of the desired primitive, and for outputting pixel pattern information indicating the desired at least one pixel pattern; and said accessing unit accesses the memory according to the pixel pattern information and stores the pixel data generated by the pixel generator into the memory in units of pixel data corresponding to the coordinate data (column 4 lines 15-23 and 33-36).

Claim 28, Rhoden et al discloses further comprising: a step of detecting, of plural pixel patterns formed on a predetermined coordinate area including the coordinate data (column 6 lines 5-20), at least one pixel pattern through which the accessing unit is allowed to access the memory and store the pixel data of the desired primitive, and outputting pixel pattern information indicating the detected at least one pixel pattern (column 4 lines 15-23); and said step of accessing comprising accessing the memory according to the pixel pattern information (column 2 lines 54-61), and comprising storing the pixel data generated by the pixel generator into the memory in units of pixel data corresponding to the coordinate data (column 4 lines 15-23 and 33-36).

5. Claims 7 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoden et al. in view of (Murphy)6,111,584), and further in view of May, U.S. Patent No. 5,815,168.

Claims 7 and 27, Rhoden et al and Egan does not specifically disclose wherein the control circuit calculates an aspect ratio of the desired primitive based on the coordinate data and specifies the shape of the optimal pixel pattern according to the aspect ratio. However, May discloses this in column 3 lines 42-49. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the aspect ratio of May with the system of Rhoden because this would have provided optimal performance depending on the shape of the image as suggested by May (column 3 lines 42-49).

Response to Arguments

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (571) 272-7644. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached at (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 28, 2005

A handwritten signature in black ink, appearing to read "Kimbinh T. Nguyen".

KIMBINH T. NGUYEN
PRIMARY EXAMINER